



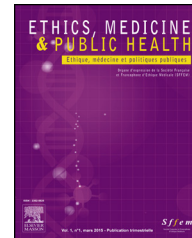
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LETTER TO THE EDITOR

COVID-19 vaccine hesitancy among Indigenous people in India: An incipient crisis



KEYWORDS

Indigenous people;
 India;
 COVID-19 vaccine;
 Vaccine hesitancy

Dear Editor,

The cause of the COVID-19 pandemic, SARS-CoV-2, is the pneumonia-causing virus that was first detected in China in December 2019 [1]. Since then, the healthcare systems of various countries have been crippled dealing with this deadly virus [1].

The first case of SARS-CoV-2 was detected in India in January 2019 and no significant transmission was observed for few months of its inception [1]. But from March 2019 onwards, the cases began to rise exponentially and the whole Indian subcontinent was affected [1]. Various therapeutic agents were used to treat COVID-19 patients and were subsequently withdrawn due to their lack of efficacy. Therefore, this highlighted the necessity to formulate a safe and effective vaccine to combat this viral infection and now various WHO-approved vaccines against COVID-19 are available worldwide [2].

The COVID-19 vaccination program started in India in January 2021, prioritizing frontline healthcare providers in the first phase and then covering the rest of the population gradually [3]. While only 1% of the Indian population had been vaccinated against COVID-19, some indigenous people of India began to report vaccine hesitancy [3].

The term Adivasi was coined in the 1930s and is derived from two separate Hindi words; 'adi' meaning of earliest times and 'vasi' meaning inhabitant [4]. It is a collective name used to describe many indigenous people of India [4]. They are not a homogenous group but consists of people living in different regions of India varying significantly in culture and ethnicity [4].

Adivasi people living in different tribal communities constitute around 8.2% of the Indian population [5]. These people are forest dwellers and have a deep-rooted relationship with forests and nature [6]. Most of them are illiterate, malnourished, and have poor access to good sanitation and

healthcare services [5]. The regions of India dwelled by these tribal people can be highlighted on the Indian map as shown in Fig. 1.

The COVID-19 pandemic proved more lethal for them because they live in congested areas and have poor hygienic conditions [5]. The Adivasi people of Indian tribes were one of the groups hit worst by COVID-19 imposed lockdowns in the country as most of them are refugees and migrant workers in different cities of India [6].

COVID-19 vaccine hesitancy among indigenous people of India is also challenging. Rumors about the development, efficacy, and reliability of COVID-19 vaccines made Adivasi people hesitant to take the COVID-19 vaccines [3]. Some of the indigenous people of India consider the COVID-19 vaccines as ineffective to combat this deadly disease [3]. Some believe that vaccines cause infertility and other problems and some think that vaccines can increase the susceptibility to become infected with COVID-19 [3].

It is also believed by people of different tribes of India that vaccines are not safe and they can even increase the mortality rate [3]. Indigenous people of India usually don't trust the government officials due to economic and healthcare inequalities among these tribal communities, which is also a major factor contributing to vaccine hesitancy among them [5].

Unequal distribution of the COVID-19 vaccines between big cities and tribal areas of India has also been an emerging problem for the indigenous people [5]. This is due to the lack of technological literacy in these people and the poor availability of proper refrigeration facilities required for the storage of some vaccines [5]. Indigenous people of India also do not know how to use the vaccine registration portal, such as Co-WIN, which may also hamper vaccination drive in these areas [5].

Given these obstacles, the government should improve the access to healthcare facilities for indigenous people of India and strengthen education awareness that will drive positive regards towards the COVID-19 vaccine among the Indigenous people in India.

Human and animal rights

The authors declare that the work described has not involved experimentation on humans or animals.

Informed consent and patient details

The authors declare that the work described does not involve patients or volunteers.



Figure 1. Map of India showing different Adivasi tribes within different states of India.

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Disclosure of interest

The authors declare that they have no competing interest.

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Q. Mehmood^{a,*}, S.S. Tebha^b,
A.T. Aborode^c, Aayush^d

^a King Edward Medical University, Lahore, Pakistan

^b Department of Neurosurgery and Neurology, Jinnah Medical and Dental College, Karachi, Pakistan

^c Healthy Africans Platform, Research and Development, Ibadan, Nigeria

^d Department of Medicine, Government Medical College, Jalaun, Uttar Pradesh, India

* Corresponding author. Mohalla Sultan Pura, Street no. 1, Hafizabad road, 52250 Gujranwala, Pakistan.

E-mail address: qasimmehmood1051@gmail.com

(Q. Mehmood)

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